



California Stormwater Quality Association®

Dedicated to the Advancement of Stormwater Quality Management, Science and Regulation

May 1, 2018

Central Valley Regional Water Quality Control Board

Attn: Glenn Meeks

Submitted electronically – glenn.meeks@waterboards.ca.gov

Subject: CASQA Comment Letter – Amendments to the Water Quality Control Plans for the Sacramento River and San Joaquin River Basins and the Tulare Lake Basin (Basin Plans) to Incorporate a Central Valley-wide Salt and Nitrate Control Program

Dear Mr. Meeks:

The California Stormwater Quality Association (CASQA) is writing to comment on the proposed amendments to the Water Quality Control Plans for the Sacramento River and San Joaquin River Basins and the Tulare Lake Basin (Basin Plans) to Incorporate a Central Valley-wide Salt and Nitrate Control Program (Proposed Amendment). CASQA understands that the intent of the Proposed Amendment is to provide a framework for the Central Valley Regional Water Quality Control Board (Regional Water Board) to regulate salt and nitrate throughout the Central Valley in a sustainable manner, while ensuring that groundwater users are provided with a safe drinking water supply.

Our comments focus on issues that are of statewide importance, may set a precedent given the number of Salt and Nutrient Management Plans that are being developed statewide, and potentially affect the regulation and/or involvement of a wide range of stormwater permittees within the Central Valley region including 23 Phase I municipalities, more than 120 Phase II municipalities (traditional and non-traditional)¹, about 1,950 industrial facilities, and about 2,000 construction sites².

Our primary intent is to provide comments that clarify that:

- Stormwater (dry and wet weather) should be managed and recognized as a resource rather than a waste;
- As a resource, stormwater permittees should have an opportunity to participate in the Salinity Alternative Permitting Approach with in-kind services through the development / implementation of stormwater capture and use projects instead of strictly financial contributions; and
- The Salt Control Program should provide flexibility so that stormwater permittees can implement the pollutant prioritization and watershed approaches envisioned in the stormwater permits.

¹ Region-wide Municipal Stormwater Permit, Order No., R5-2016-0040, Attachment F, Fact Sheet, page F-4

² Active industrial sites and construction projects in the Storm Water Multiple Application and Report Tracking System (SMARTS) database, March 2018

I. Stormwater should be Recognized and Managed as a Resource

Over the past decade, there has been a fundamental shift in how stormwater (including wet and dry weather runoff) is valued and managed so that multiple objectives may be achieved including attainment of water quality standards, water conservation, and water supply. Instead of being viewed as a waste or hazard, it is now understood that stormwater must be treated as a valuable water resource in order to address the numerous supply and demand pressures on our water resources. This shift has been widely recognized and incorporated into numerous strategies and policy documents in California. Examples include, but are not limited to, the following:

- *California Stormwater Quality Association (CASQA) – Vision and Strategic Actions for Managing Stormwater in the 21st Century*³
 - Vision – Manage stormwater as a vital component of California’s water resources in a sustainable manner, to support human and ecological needs, to protect water quality, and to enhance and restore our waterways.
 - Principle – Sustainable stormwater management uses runoff as a resource, protects water quality and beneficial uses, and efficiently minimizes pollution.
- *State Water Resources Control Board - Strategy to Optimize Resource Management of Storm Water (STORMS)*⁴
 - Project 1a Promote Storm Water Capture and Use & Project 1b Identify and Eliminate Barriers to Storm Water Capture and Use
 - Develop strategies and set regionally-based goals to increase storm water capture and use.
 - Identify actions required to eliminate existing legal/regulatory, logistic, and technical barriers to the implementation of storm water capture and beneficial use and begin to implement them
- *Recycled Water Policy*⁵
 - We strongly encourage local and regional water agencies to move toward clean, abundant, local water for California by emphasizing appropriate water recycling, water conservation, and maintenance of supply infrastructure and the use of stormwater (including dry-weather urban runoff) in these plans... (Preamble - Page 1)
 - Increase the use of stormwater over use in 2007 by at least 500,000 afy by 2020 and by at least one million afy by 2030.
 - It is also the intent of the State Water Board that because stormwater is typically lower in nutrients and salts and can augment local water supplies, inclusion of a significant stormwater use and recharge component within the salt/nutrient

³ https://www.casqa.org/sites/default/files/library/other/vision_and_strategic_actions_for_managing_stormwater_in_the_21st_century_2017_version_11.pdf

⁴ https://www.waterboards.ca.gov/water_issues/programs/stormwater/storms/

⁵ https://www.waterboards.ca.gov/water_issues/programs/water_recycling_policy/docs/rwp_revto.pdf

management plans is critical to the longterm sustainable use of water in California.
(b. Adoption of Salt/Nutrient Management Plans – Page 6)

- b. Stormwater The State Water Board strongly encourages all water purveyors to provide financial incentives for water recycling and stormwater recharge and reuse projects. The State Water Board also encourages the Regional Water Boards to require less stringent monitoring and regulatory requirements for stormwater treatment and use projects than for projects involving untreated stormwater discharges. (Page 16)
- *Central Valley-wide Salt and Nitrate Control Program and Final Salt and Nitrate Management Plan (SNMP)*⁶
 - Stormwater Recharge Master Plan Study (Draft Staff Report, pages 42, 48)
 - The continuation of discharges from wastewater, storm water, and agriculture to surface waters in the Central Valley Region at current levels is not anticipated to result in substantial degradation for salinity constituents relative to existing conditions. (Draft Staff Report, pages K-23-24)
 - For groundwater, water quality degradation with regard to salinity constituents is not anticipated in relation to storm water discharges, as storm water is a result of precipitation, which is generally not a high salinity source. (Draft Staff Report, page K-24)

As a result of the shift in how stormwater should be managed and the recognition that stormwater is not a significant contributor of salt to surface waters⁷, the following modifications to the Proposed Amendment are recommended.

Recommendation #1: Add a goal to the Salt and Nitrate Control Program that recognizes the significance of a stormwater capture and use component to the overall strategy. [Draft Staff Report, page 33]

Based on the CV-SALTS SNMP and its supporting studies, salt concentrations in surface and ground waters generally continue to increase over time under existing water quality management programs and strategies to control salt. Given these findings, the SNMP identified the need for the implementation of a salt management strategy with the following goals:

- *Control the rate of degradation through a “managed degradation” program;*
- *Protect beneficial uses by applying appropriate antidegradation requirements for high quality waters.*
 - *Implement salinity management activities to achieve long-term sustainability and prevent continued impacts to salt sensitive areas; and*

⁶ <https://www.cvsalinity.org/docs/central-valley-snpm/final-snpm.html>

⁷ The Central Valley Salinity Project Final Draft Report (March 16, 2008) (aka the ‘Howitt report’) did not identify municipal urban runoff/stormwater as a significant source of salt load.

https://www.waterboards.ca.gov/centralvalley/water_issues/salinity/centralvalley_salinity_alternatives_archives/committees_of_cvsalts_leadership_grp/social_economic_impact_committee/final_draftv2_mar24_08.pdf

- *Protect beneficial uses by maintaining water quality that meets applicable water quality objectives and pursuing long-term managed restoration where reasonable, feasible and practicable; and*
- 5. *Implement a stormwater capture and use component as a part of the salt control program to support and encourage water conservation, conjunctive use of surface and groundwater, and improve local water supplies and groundwater quality.*

Recommendation #2: Clarify that the Nitrate Control Program Conditional Prohibition does not apply to surface water discharges or stormwater-based capture and use projects. [Draft Staff Report, page 75]

The Conditional Prohibition of Nitrate Discharges shall apply to all permittees discharging nitrate to groundwater pursuant to Board-issued waste discharge requirements and conditional waivers, except those dischargers regulated under the Board's Irrigated Lands Regulatory Program (ILRP). Dischargers regulated under the ILRP will instead be required to comply with the initial phase of the Nitrate Control Program through an amendment to the ILRP General Orders, which the Regional Water Board shall consider within 18 months of the effective date of the Basin Plan Amendment. This Conditional Prohibition shall not apply to surface water discharges or stormwater-based use and recharge projects.

Recommendation #3: Add a definition for the term “stormwater” so that it is clear that it may include both dry weather and wet weather runoff. [Draft Staff Report, pages 83-86]

Stormwater – Stormwater runoff, snow melt runoff and surface runoff and drainage. Surface runoff and drainage pertains to runoff and drainage resulting from precipitation events. [40 CFR 122.26(b)(13)] The term stormwater includes dry weather urban runoff that is not an illicit discharge or is an authorized non-stormwater discharge.

II. Stormwater Permittees should be provided Flexibility to Participate in the Salinity Alternative Permitting Approach with In-kind Services such as Stormwater Capture and Use Projects

The Proposed Amendment recognizes that 1) the Salt Control Program will be implemented in three phases, with each phase having a duration of ten to fifteen years for a total duration of thirty to forty-five years; and 2) permittees selecting the Alternative Compliance Permitting Approach must participate financially. Although previous discussions with Regional Water Board staff indicated that there may be an opportunity to participate via in-kind services (such as capture and use projects), this is not currently an option within the Proposed Amendment. For example, the language for the Salt Control Program states [emphasis added]:

Permittees electing the Alternative Salinity Permitting Approach shall be required to fully participate in efforts related to conducting the P&O Study including providing at least the minimum required level of financial support determined by the lead entity. The level of participation may vary based on salinity in the discharge, local conditions or

other factors. The needed level of participation would be established by the lead entity (i.e., CVSC) that is overseeing the P&O Study. [Draft Staff Report, page 44]

Not only are municipalities already fiscally challenged to implement the range of programs that are already required (including the Stormwater Program, Total Maximum Daily Loads, Trash Amendments, Constituents of Emerging Concern Monitoring, and the Delta Regional Monitoring Program), but it seems counter intuitive that stormwater permittees may be required to financially contribute to the Alternative Compliance Permitting Approach when it is recognized that stormwater is not a significant source of salt⁸ and the very stormwater capture and use projects that they are implementing due to a number of other regulatory requirements may be a part of the long-term management approach for the control of salt in the Central Valley.

Since the management of stormwater through capture and use projects is a common goal and encouraged in the numerous documents listed above as well as the Central Valley Region-wide Stormwater Permit, Phase II Small Municipal Stormwater Permit, and the Industrial General Permit⁹, CASQA strongly recommends that, if a stormwater permittee is deemed to be causing or contributing to persistent exceedances of salinity-related water quality objectives, that they be provided the flexibility to participate in the Alternative Compliance Permitting Approach with in-kind services/projects. As needed, the Proposed Amendment could also define “in-kind” services/projects and/or indicate that the in-kind services/projects are subject to the approval of the lead entity.

Recommendation #4: Conduct a global find and replace search of the Proposed Amendment and replace the term “financial” with the term “financial or in-kind services/projects”

III. The Salt Control Program should Provide Flexibility so that Stormwater Permittees can Implement the Pollutant Prioritization and Watershed Approaches Envisioned in the Stormwater Permits

One of the cornerstones of the Central Valley Municipal Region-wide Stormwater Permit is the incorporation of the Pollutant Prioritization approach, whereby the permittees may develop a customized stormwater management program based on an analysis of the prioritized water quality constituents consistent with the process as outlined within the Permit¹⁰. The Draft Industrial General Permit also supports the ability of industrial permittees to comply with the discharge prohibitions and receiving water limitations through on-site or off-site compliance options.

⁸ The Lower San Joaquin River Salt and Boron TMDL concluded that stormwater contributes negligible salinity loads to the Lower San Joaquin River; less than one quarter of one percent of the river’s total salt load as measured at the Airport Way Bridge near Vernalis (Central Valley Regional Water Quality Control Board 2004). [Draft Staff Report, page C-7]

⁹ Proposed Amendment to the Industrial General Permit (Tentative Order WQ 20XX –XXXX-DWQ) (Fact Sheet) The State Water Board is providing the Compliance Options in this General Permit to incentivize storm water capture and use in a concerted effort to retrofit the existing “impervious” urban landscape with green infrastructure to restore storm water infiltration capacity previously lost in developed areas. Storm water infiltration operations in developed areas provides multiple benefits, including: (1) improved groundwater recharge from treated industrial storm water, (2) restoration of lost watershed processes such as base flow to creeks, and (3) reduced pollutant loads discharged to surface waters. (Compliance Options – Page 23)

¹⁰ Central Valley Region-wide Municipal Stormwater Permit, Section D.1 (page 24) and E.1 (pages 25-27)

In fact, this pollutant prioritization/watershed-based approach is also supported by the CASQA Vision as well as the State Water Board STORMS projects as outlined below.

- *California Stormwater Quality Association (CASQA) – Vision and Strategic Actions for Managing Stormwater in the 21st Century*¹¹
 - Principle – Policies, regulations, guidance, training, and funding need to support sustainable stormwater management.
 - Action 2.6 – Establish watershed-based or equivalent program
- *State Water Resources Control Board - Strategy to Optimize Resource Management of Storm Water (STORMS)*¹²
 - Project 3b Develop watershed-based compliance and management guidelines and tools
 - Develop guidance for municipalities, which may include how to: (1) prioritize their water quality issues and limit pollutants; (2) identify all sources of pollutants; (3) plan and implement a watershed-based storm water management plan; and (4) conduct a reasonable assurance analysis (RAA) for the water quality outcomes of the watershed-based plans.

Although many of the Phase I municipal stormwater permittees have already completed their Assessment and Prioritization processes and submitted this information to the Regional Water Board (as of May 2017) and, in fact, have not identified salinity as a Priority Water Quality Constituent, the language of the Salt Control Program appears to require the permittees to be subject to the Conservative Salinity Permitting Approach or the Alternative Salinity Permitting Approach if they are unable to meet the numeric effluent limits for AGR and MUN beneficial uses, which is more consistent with TMDLs and the Region-wide Permit Prescriptive Compliance Approach^{13,14}.

In addition, the Salt Control Program requires the stormwater permittees to demonstrate through monitoring data how they meet the effluent limit/limitations to determine if they will select the Conservative or Alternative Salinity Permitting Approach. This exceedance assessment is similar to the TMDLs within the Municipal Region-wide Permit in that the effluent limit/limitation is numeric instead of technology-based¹⁵. If the effluent limit/limitation is numeric, then the permittees should be provided the same compliance determinations and flexibility that has been provided for the TMDLs within the Municipal Region-wide Permit as

¹¹ https://www.casqa.org/sites/default/files/library/other/vision_and_strategic_actions_for_managing_stormwater_in_the_21st_century_2017_version_11.pdf

¹² https://www.waterboards.ca.gov/water_issues/programs/stormwater/storms/

¹³ AGR – 700 us/cm EC (as monthly average); 900 us/cm EC (as an annual average)

¹⁴ Central Valley Region-wide Municipal Stormwater Permit, E.2 (page 27) “Under the Prescriptive compliance approach, all WQCs shall be treated as PWQCs.”

¹⁵ Central Valley Region-wide Permit, Finding 29 “...Accordingly, with the exception of certain WQBELs based on applicable TMDLs, this Order does not contain numeric effluent limits, and instead includes requirements to reduce pollutants in storm water discharges to the MEP and other provisions to promote attainment of water quality standards over time.”, pages 10-11.

well as the compliance options currently being contemplated for the Industrial General Permit (Attachment I).

Recommendation #5: Clarify the process that is used to determine if a stormwater permittee is causing or contributing to persistent exceedances of a numeric salinity-related water quality objective and thus, subject to the Alternative Salinity Permitting Approach. [Draft Staff Report, pages 37-41]

The recommended language below is consistent with language proposed / incorporated in a number of Phase I permits (including the Region-wide Municipal Stormwater Permit), the Phase II General Permit, and proposed for the Industrial General Permit for TMDLs. This will also provide the clarification needed for the examples provided in the Draft Staff Report, Appendix I.

Add a new #3 to the NPDES Surface Water Discharges (Draft Staff Report, page 40)

3. A stormwater Permittee is not causing or contributing to a persistent exceedance of EC within the receiving waters if one or more of the criteria below are met:
 - a. Receiving water monitoring and analysis by the Permittee, as approved by the Regional Water Board or its designee, demonstrates attainment of the applicable water quality standard in the waterbody; or
 - b. Receiving water monitoring does not demonstrate attainment of the applicable water quality standard in the waterbody, but the Permittee demonstrates that they are not causing or contributing to the persistent exceedances; or
 - c. The Permittee is meeting the applicable water quality objective; or
 - d. The Permittee is not meeting the applicable water quality objective, but demonstrates that other, uncontrollable sources are resulting in the persistent exceedance; or
 - e. The Permittee demonstrates, in a manner approved by the Regional Water Board or its designee, that no discharges to the applicable water body occurred during the relevant time period; or
 - f. The Permittee has not identified salinity as a priority water quality constituent and/or is implementing another permitted alternative compliance option (such as an approved water quality-based stormwater/watershed plan, an onsite or offsite capture and use project, etc.) that will meet the intent and objectives of the salt control program.

Recommendation #6: Clarify that the stormwater permittees are not required to prohibit or prevent discharges that may originate from uncontrollable sources. [Example - Draft Staff Report – page 44]

Throughout the proposed Basin Plan Amendment language and Draft Staff Report, the term “where reasonable, feasible, and practicable” is used to assist in identifying conditions for the plans and projects that may be developed and implemented. Although CASQA supports the use of this language and thinks that it is important to ensure that the plans and projects are fiscally responsible and commensurate with the improvement in water quality, it is recommended that this term also recognize controllable versus uncontrollable sources.

Throughout the state and within the Central Valley, municipal stormwater programs have encountered high salinity due to saline groundwater seeping into the conveyance system. In these instances, the groundwater seepage is an “uncontrollable” non-stormwater source. Under either Salt Control Program approach (Conservative or Alternative), CASQA submits that it would not be reasonable, feasible, or practicable to control salt from groundwater seepage into the conveyance system by sealing the conveyance system (not to mention flood control concerns). Thus, CASQA requests that the expectations of what constitutes “reasonable, feasible, or practicable” be clarified for municipal stormwater permittees.

An example edit to the language is provided below, however this language should be provided for the Conservative approach as well.

3. Implementation of Reasonable, Feasible, and Practicable Efforts to Control Salt - The Regional Water Board will continue to require implementation of reasonable, feasible and practicable efforts to control levels of salt in discharges. Such efforts may include, but are not limited to, implementation of management practices that are designed to reduce salt in discharges; implementation of pollution prevention plans, watershed plans, and/or salt reduction plans that help to reduce salt loads in discharges to surface waters; and, continued monitoring for salt in surface water as part of existing local, watershed-based or regional monitoring programs, in coordination with monitoring under the Salt and Nitrate Control Program.

Include a footnote to Item #3

The Regional municipal stormwater NPDES permit does not prohibit several categories of non-storm water discharges that are generally not expected to be a source of pollutants to receiving waters, many of which originate from uncontrollable sources¹⁶. Uncontrollable non-storm water sources to conveyance systems may include rising groundwater that seeps into the conveyance structures. Because of elevated groundwater salinity levels in various locations throughout the Central Valley, groundwater seepage is an uncontrollable source of salinity to conveyance structures. Further, it is unknown if the control of groundwater seepage into conveyance structures is necessary to address salinity impairments of surface waters in the Central Valley. Capital costs and fiscal resources to prevent groundwater seepage into conveyance structures is likely to be substantial, the costs of which have not been assumed as part of the SNMP or evaluated as part of this staff report. At this time, the Regional Water Board does not consider capital improvements to address groundwater seepage into conveyance structures to be reasonable, feasible or practicable for the control of levels of salt in municipal stormwater discharges.

¹⁶ Regional Municipal Permit, Attachment F – Fact Sheet, pages F-50-51

Recommendation #7: Clarify that the Region-wide Permit Pollutant Prioritization Approach allows for the customization of the Stormwater Management Program based on the Priority Water Quality Constituents. [Draft Staff Report – Appendix C, page C-5]

Discharge Prohibitions

The primary compliance approach (pollutant prioritization) allows the permittee to develop a customized storm water management plan⁸ based on the prioritized water quality constituents. The objective of the storm water management plan is to describe a storm water management program that identifies and addresses MS4 discharge impacts so that such discharges do not cause or contribute to exceedances of water quality standards in waters of the United States (as defined in 40 C.F.R. § 230.3). The storm water management plan will identify the highest priority water quality constituents (PWQCs) within its Jurisdictional Runoff Area that will be addressed and develop includes milestones, strategies and activities, and corresponding schedules for implementation. In general, the permittee's full compliance with the requirements in the NPDES permit, including timely implementation of the storm water management program, constitutes compliance with the discharge prohibitions.

Thank you for your thoughtful consideration of these observations, comments, and recommendations. If you have any questions, please contact CASQA Executive Director Geoff Brosseau at (650) 365-8620.

Sincerely,



Daniel Apt, Chair
California Stormwater Quality Association

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